

and stored audio data and voice samples, wherein an audio output from the device is produced [to provide altered audio and voice presentations].

2. (amended) The interactive digital music device of claim 1, further comprising means for providing visual effects complementing the audio output from the device [said altered audio and voice presentations].

3. (amended) The interactive digital music device of claim 2, wherein [said] the means for providing visual effects [,] comprises visual means for providing written song lyrics.

4. (amended) The interactive digital music device of claim 2, wherein [said] the means for providing visual effects, comprises visual means for providing complimentary light patterns for the audio output from the device [said altered audio and voice presentations].

5. (amended) The interactive digital music device of claim 1, wherein [said] the programmable memory comprises flash memory [, and wherein said received radio signals, unique musical compositions and altered audio and voice presentations are digitized].

6. deleted

7. (amended) An Automatic Composer in a digital multi-media device for composing a musical piece according to automatic composition instructions and for mixing sound samples into [it] the automatically composed musical piece, comprising:

a processor having an input and an output, [said] the processor operating to [implement] execute the automatic composition instructions, wherein automatically composed music is generated;

a first memory [for] storing a music database for use in accordance with the automatic composition instructions, wherein the music database is accessed during execution of the automatic composition instructions;

a second memory [for] storing the sound samples, [said] wherein the first and second memories [being] are connected to the processor input, wherein a music synthesizer is connected to the processor output for control by [said] the processor and providing a synthesizer output; [,] and

a summation and digital to analog conversion circuit, wherein the summation and digital to analog conversion circuit receives the [for receiving] processor and synthesizer outputs and [for providing] provides a summed analog output.

8. (amended) The Automatic Composer [as set forth in] of claim 7, wherein [said] the summation and digital to analog conversion circuit [,] comprises a digital to analog converter that receives the [for receiving said] synthesizer and processor outputs and [for providing] provides analog signals, and a second [a] summation circuit [for receiving said] that receives the analog signals.

9. (amended) The Automatic Composer [as set forth in] of claim 7, wherein [said] the summation and digital to analog circuit comprises a digital adder [for summing] that sums the processor and synthesizer outputs and [for providing] provides a summed digital output, and a digital to analog converter [for receiving said] that receives the summed digital output.

10. (amended) The Automatic Composer [as set forth in] of claim 9, wherein [said] the [processor comprises an internal] digital adder is integral to the processor.

11. (amended) The Automatic Composer [as set forth in] of claim 9, wherein [said] the [synthesizer comprises an internal] digital adder is integral to the synthesizer.

12. (amended) The Automatic Composer [as set forth in] of claim 7, wherein [said] the synthesizer comprises [an additional] a second processor [for directly accessing said] that accesses the second memory [for] storing sound samples, and wherein [said] the synthesizer [comprises means for handling] processes the sound samples as a special case of basic instrumental sounds.

13. (amended) The Automatic Composer [as set forth in] of claim 7, further comprising a microphone for recording external sound samples, and means for starting and stopping recording.

14. (amended) The Automatic Composer [as set forth in] of claim 13, further comprising means for automatically eliminating the silent periods that precede and follow a [useful] portion of a recording, and means for implementing a speech compression algorithm to compress the [useful] portion of the recording.

15. (amended) The Automatic Composer [as set forth in] of claim 7, wherein [said] the processor comprises:

means for integrating [said] the sound samples into musical compositions; [,]

means for functioning to select [said] the sound samples according to a pseudo-random sequence; [,]

means for directing [said] at least certain of the sound samples to be played at a predetermined time between the beginning and the end of a musical bar as governed by [certain] one or more musical rules; [,]

means for directing [any] a portion of the at least certain of the sound samples to be played from its entirety to any part thereof; [,] and

means for optionally selecting repetition of the at least certain sound samples.

16. (amended) The Automatic Composer [as set forth in] of claim 7, wherein [said] the processor comprises means for imparting special effects to the musical piece, whereby the musical piece is optionally modified with any [ones] one or more of echo, vibrato, distortion, frequency modulation, and filtering effects.

17. (amended) The Automatic Composer [as set forth in] of claim 7, wherein [said] the processor comprises a clock operating at 25 MHz maximum, and wherein [said] the first memory and [said] the second memory comprise a memory having a capacity of 2 MB maximum.